Information Services Industry Trends

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Information Services Industry

Competing in a Revolution

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Opportunities and Conclusions

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Notes

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- Introduction
- Environment
- IT Services Markets
- Software and Services Opportunities
- Strategies for Success
- Recommendations

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Notes

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Competing in a Revolution

What used to work doesn't work now!

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Notes

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Topics

- Industry In Revolution
  - Revolutions
  - Impacts
  - Outlook

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Notes

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Topics

- Competitive Reactions
  - Partnering
  - Alliances
  - Vendor Strategies
- Future Revolutions

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Notes

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U.S. Information Services Market Outlook

IS-66

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Notes

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Information Services Market

- Major Trends
  - Sheer market size causes lower growth rates
  - International markets grow more rapidly

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Notes

Information Services Market

- Major Trends
  - Growing acceptance of standards, open systems
  - Systems complexity fuels need for vendor expertise

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Notes

Information Services Market

- Major Trends
  - Introduction of new technology drives market growth, but user "absorption" capability limits growth

IS-4b

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Notes

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Information Services Market

- Major trends
  - Shift to client/server gaining momentum
  - Outsourcing acceptance increasing

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Notes

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Information Services Market

- Major Trends
  - Globalization of information services creates market opportunities
  - Vendor consolidation continues
  - Profit opportunities shift from equipment to services, software

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Notes

Key Trends for the 1990s

- Products and services markets blurring
- Changing market structure
- Internationalization
- Standards
- Industry market focus

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Notes

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Products and Services Markets Blurring

- Traditional competitors are changing:
  - Traditional *product* companies adding services
  - Traditional *service* companies adding products

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IS-7a

Notes

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Products and Services Markets Blurring

- Traditional competitors are changing:
  - Consulting companies adding development services

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Notes

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"Blurring" of Offerings Reflects
Changing Market Structure

New technologies will create additional changes

- Image processing
- Integrated voice/data
- High-performance digital communications

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IS-8a

Notes

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“Blurring” of Offerings Reflects
Changing Market Structure

New technologies will create additional changes

- Object-oriented programming
- Client/server-based application

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IS-8b

Notes

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"Blurring" of Offerings Reflects
Changing Market Structure

- *Systems integration* continues to emerge
- Interorganization services becoming critical

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IS-9a

Notes

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“Blurring” of Offerings Reflects
Changing Market Structure

- Computer companies emphasizing communications
- Communications companies adding computer units

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Notes

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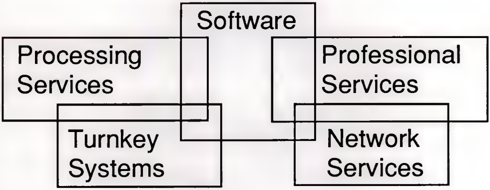
IS Market Structure—1980s
INPUT's View



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Notes

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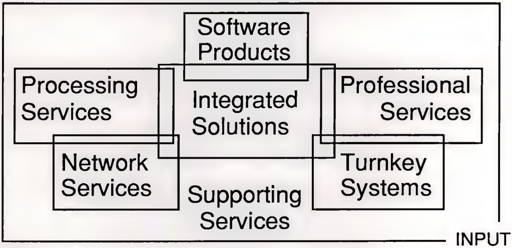
Information Services Market Structure—1990s

Emphasis on Supporting Services



IS-11

Notes

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Customer Support Needs

- Network creation/management
- Software customization (local/regional)
- Software maintenance, support
- Training of end users

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MPRE-37a

Notes

Customer Support Needs

- Support of end users
- Installation
- Conversion
- Documentation

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MPRE-37b

Notes

Internationalization
A Dominant Trend in the '90s

- Collapsing market barriers
  - Europe (East and West)
  - North America

IS-14a

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Notes

Internationalization
A Dominant Trend in the '90s

- Growing market interest/participation
  - Pacific Rim
- Internationalization of buyer requirements

IS-14b

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Notes

Internationalization

- U.S. computer manufacturers ahead
- U.S. information services companies falling behind
- Competition coming to U.S.:
  - CAP Gemini Sogeti
  - Sema Group
- Japanese vendor interest

IS-15

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Notes

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Standards

- Evolving, Conflicting
- Problems

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Notes

Standards

Driven by:

- Internationalization
- Buyer's integration requirements
- Large providers/coalitions

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IS-17

Notes

Standards

- *Focused on:*
  - Technical interface
  - Applications interface
  - Human interface, HUMATICS™

IS-18

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Notes

Standards

- OSF vs. UNIX int'l
- MCA vs. EISA
- Graphical interfaces
- OSI
- X/OPEN
- SAA
- SQL

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Notes

Open Software Foundation

- IBM
- Hewlett-Packard
- Digital Equipment
- Siemens
- More

INPUT

Notes

Two UNIX Standards Are Developing

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Notes

Rival Group: UNIX Int'l

- AT&T
- Sun
- Unisys
- NCR
- More

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Notes

Standards Are Evolving
Long-Range Implications

- Diminishing importance of proprietary operating systems
- Systems integration a key to success
- Ease of program customization

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Notes

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Standards Are Evolving
Long-Range Implications

- More comprehensive global networks of diverse computers
- Graphics-based user interface
- Fewer hardware manufacturers

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Notes

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Standards Inhibitors

- Application interface confusion
  - RDBMS vendors
  - Computer vendors

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Notes

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Standards Inhibitors

- Enterprise architecture competition
  - SAA (IBM)
  - NAS (DEC)
  - New Wave (HP)
  - Other independents

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Notes

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Acquisition Trends

- Pace of acquisitions slowed recently
- 'Wait and see' attitude
- Highest level of activity:
  - Software products
  - Professional services
  - Systems integration

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MPRE-46a

Notes

Acquisition Trends

- Strong interest in processing services companies—outsourcing factor
- Interest in larger companies

IS-29

Notes

Issues Addressed by Acquisitions in the Information Services Industry

- Declining information services IPOs
- Declining interest of venture capitalists
- Maturing market growth rates

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MPRE-48

Notes

Issues Addressed by Acquisitions in the Information Services Industry

- Increasing competition from large companies
- Globalization of competition
- Shortening product life cycles/higher product development costs

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MPRE-49

Notes

Issues Addressed by Acquisitions in the Information Services Industry

- Product and services redundancies
- Lack of "breakthrough" (high growth) technologies

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Notes

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Issues Addressed by Acquisitions in the Information Services Industry

- "Critical Mass" issues in both product development and marketing
- Capital constraints

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IS-32b

Notes

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Acquisition Process

- Provides capital from 'outside' sources
  - Growth still seen in information services
  - Significant resources available
  - Minority positions lower risk

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MPRE-52

Notes

Summing It Up

- Broadening product strategies
- Emphasis on "total solution"
- Focus on quality and service

Accomplished through:

- Self-funded expansion
- Consolidation—partnering/ acquisitions

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IS-35

Notes

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Systems Management

- Market of the 1990s
- Evolution and revolution
- Offerings to become mix of
  - Information technology
  - Professional expertise
  - Business execution

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Notes

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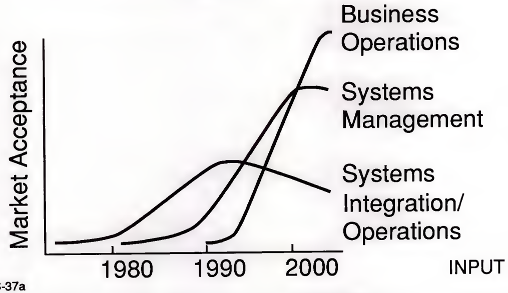
Outsourcing Market Waves



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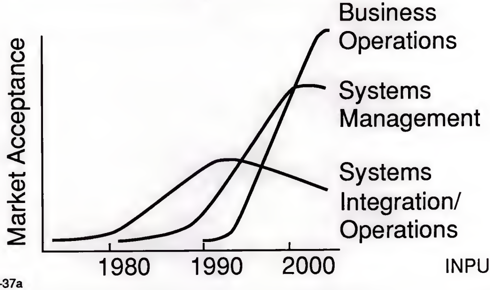
Notes

10/26/92

Outsourcing Market Waves



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Notes

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Business Operations Market

- Potential market 2 to 5 times information systems expenditures
- Contractors will show reduction in overall costs of 25% or more

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Notes

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Business Operations Examples

- Insurance claims processing
- Telephone company yellow pages operation
- Credit card operations
- Coupon processing for retailers
- Fulfillment for direct marketing

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IS-39

Notes

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U.S. IS Industry Conclusions

- Slower growth in near term
- Shift to broad-based services zones
- Large services vendors grow fastest
- Software products—turmoil continues

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IS-40

Notes

Information Services Industry, 1980 vs. 1990

Difference	Implication
Five times as big	Slowing growth
Many large vendors	Consolidation and dominance
Stronger vendors	Greater reliance by user

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IS-41

Notes

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Information Services Industry, 1980 vs. 1990

Difference	Implication
Willingness to outsource operations	Processing services shifts to systems operations
More technological alternatives	More services required to integrate

IS-42

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Notes

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Information Services Industry, 1980 vs. 1990

Difference	Implication
Greater variety of services	Changing distribution channels
Worldwide orientation	Breadth and complexity of service offerings
Many small vendors	Alliances to succeed

IS-43

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Notes

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Information Services Industry—What It Does

Provides services and products to develop, implement and operate information technology-based systems.

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Notes

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Processing Services/ Systems Operations

- 24% of industry
- Alternatives to internal investment
- Specialized services—payroll
- Services to specific industries—banking
- Worldwide capabilities desirable

INPUT

IS- 45

Notes

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Network Services

- 8% of market
- Network applications services link organizations
  - Electronic data interchange
  - Electronic mail
  - Foundation for electronic commerce

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IS- 46

Notes

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Network Services

- Electronic information services—On-line access to text and data information
  - News services
  - Securities, credit
  - Industry information

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IS- 47

Notes

7/3/91

Professional Services/ Systems Integration

- 23% of industry
- Alternative to internal employment
- Access to skills and technology
- Solutions oriented services
- Developer of IT professionals

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IS- 48

Notes

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Applications Software Products

- 18% of industry
- Products to manage a business
- Products to improve personal productivity
- International markets

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IS- 49a

Notes

7/3/91

Turnkey Systems

- 10% of market
- Software plus hardware purchase
- Channel for applications software products
- Vendors add professional services

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IS- 49b

Notes

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Systems Software Products

- 16% of industry
- Tools that support computer operation and networks
- Products to create application systems
- U.S. vendors are leaders

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IS- 50

Notes

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U.S. Information Services Industry—Importance

- International leadership
- Outgrows the economy—2 to 3 times
- Developer of people skills
- Source of competitive strength

IS-51

INPUT

Notes

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U.S. Information Services Industry

Sector	No. of Companies
Software products	2,900
Turnkey systems	2,500
Professional services/ Systems integration	1,800

IS-52a

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Notes

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U.S. Information Services Industry

Sector	No. of Companies
Processing services/ Systems operations	3,500
Network services	500
Total	11,200

IS-52b

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Notes

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U.S. Information Services Industry, 1970 - 1990

- The industry grew 50 times
- U.S. economy grew 5.7 times
- Consists of 11,000 vendors
- Created a U.S. competitive strength

IS-58

Notes

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Primary Forces Slowing Growth

- Outsourcing—users making larger decisions
- Shifting technology foundation
- The changing buyer
- The standards process

IS-60b

Notes

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Increasing Influence of Large Vendors

- Consolidation continues
- Market share creeping up
- Outsourcing favors larger vendors
- Slows technological change and adoption

IS-62

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Notes

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New Technology Foundations

- International standards
- Graphical user interface
- Client-server
- Networking and integration

IS-63a

Notes

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New Technology Foundations

- Distributed data
- Imaging
- Engineered/re-engineered software

IS-63b

Notes

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The Changing Buyer

- General manager becomes primary buyer
- IS becomes internal consultant
- Solutions versus technology

IS-64a

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Notes

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The Changing Buyer

- Decisions become larger—take longer
- The budget is decentralized—multiple buyers

IS-64b

Notes

The Standards Process

- Buyers wait to gain benefits
- Decrease technological differentiation
- Decrease inclination to change technologies
- Can add life to existing applications
- Foundation for integration

IS-65

INPUT

Notes

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Where Is the New Beginning?

- Real user is the buyer
- Solutions not products or services
- Client-server could lead to a revolution

IS-71a

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Notes

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Where Is the New Beginning?

- Outsourcing = basis for shared success
- Standards eventually open new opportunities
- Regionalization of market

IS-71b

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Notes

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Single Message

Solutions focus on:

what it does

NOT

how it does it

IS-73

INPUT

Notes

Outsourcing
What's Different

- The vendor makes it all work
- Once out it stays out
- Developing outside drives
  - Operating outside
  - Supporting outside

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IS-77

Notes

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Why Form an Alliance?

- Short term reasons (speed)
  - Specific opportunity
  - New service sooner
  - Competitive pressure
  - Can walk away

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Notes

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Why Form an Alliance?

- Long term reasons
  - Market entry
  - Financial leverage
  - Avoid internal conflict

IS-80

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Notes

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Why Alliances Don't Work

- Unbalanced benefits
- Over extended benefits
- Unclear authority
- Biased incentive systems
- Unclear measurements

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IS-81

Notes

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Why Alliances Don't Work

Alliances require synergy—

Millar:

"Synergy is an unnatural act"

INPUT

IS-82

Notes

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Partnerships vs. Alliances

Partnerships	Alliances
Marriage	Cohabitation
Joint ownership	License to Distribute
Shared financing	Own financing
Formal	Convenient

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Notes

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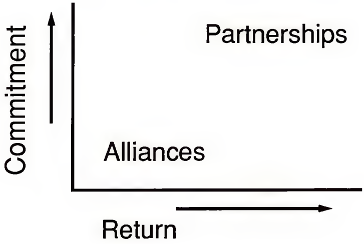
Partnerships vs. Alliances



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Notes

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Vendor Strategies

Company	Partnerships	Alliances
EDS	Few	Few
Andersen	Few	Many
IBM	Increasing	Many

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IS-85

Notes

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Vendor Strategies—EDS

- Partnerships
  - Outsourcing customers
  - Hitachi Data Systems
  - Ask Computer Systems

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Notes

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Vendor Strategies
Andersen

- Alliances
  - Access to needed technology
  - Flexibility
  - No fixed commitments

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Notes

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Future Revolutions

- Rightsizing
- Multisourcing
- Business operations

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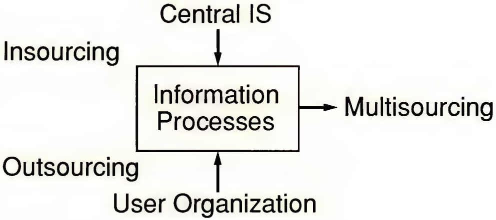
IS-88

Notes

Sourcing IT



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Notes

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Revolutions

- Downsizing
- Outsourcing
- Re-engineering
- Networking
- Open Systems

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IS-94

Notes

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Revolutions or Evolutions?

- Re-engineering
  - Organization: All or parts
  - IS Organization

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IS-95

Notes

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Re-engineering IS

- Used to be a separate function
- Now being integrated into organization
- Will it disappear?

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Notes

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The Computer Industry in the 1990s

Technology Revolutions

+

Organizational Evolutions

=

All the rules have changed

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Notes

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The Computer Industry in 2001—Vendor Role

Services
Replace
Proprietary Technology

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Notes

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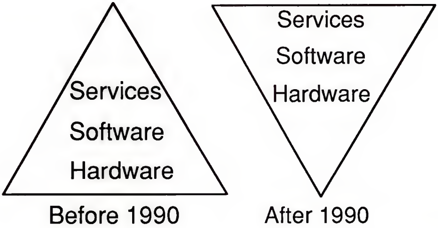
Industry Turned Upside Down



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IS- 99

Notes

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The Computer Industry in 2001

- IS is a process, not an organization
- Solutions and services are bought
- Services vendor role greatly enhanced
- Hardware role greatly diminished

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IS-100

Notes

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User's Needs

- Results
- Solutions and tools
- Vendor responsibility
- Global/local support
- Understanding of business
- Simplified decisions

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IS-101

Notes

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Supply Side

- Fragmented
- Uncoordinated
- Under-financed/resourced
- Poorly positioned

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IS-102

Notes

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Why Partner?

- Make money
- Protect against competition
  - Defensive
- New opportunities
  - Offensive

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IS-103

Notes

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Why Partner?

- Complete offering
- Upstream/downstream capabilities
- Technology “futures”
- ‘Peer-to-peer’ positioning

IS-104

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Notes

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Why Partner?

- Combines complementary strengths
- Minimizes risk
- Accelerates time-to-market
- Substitutes funding method
- Expands market opportunities

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IS-105

Notes

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Partnering Success Criteria

- Strong partners
- Clear objectives
- Minimal infrastructure
- Peer relationships

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IS-106

Notes

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What to Look For

- Resources—money, people, technology
- Distribution—global/local
- Support
- Customer base
- Product/service capabilities

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Notes

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